RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	10/563, 270	
Source:	IFWP.	
Date Processed by STIC:	1/13/06	

ENTERED



DATE: 01/13/2006

TIME: 10:16:00

IFWP

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      7
             Baum, James A.
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             Donovan, Judith C.
             Donovan, William P.
     10
             Engleman, James T.
     12
             Krasomil-Osterfeld, Karina
     14
             Pitkin, John W.
            Roberts, James K.
     22 <120> TITLE OF INVENTION: Insecticidal Proteins Secreted From Bacillus Thuringiensis
and Uses
     23
              Therefor
     27 <130> FILE REFERENCE: 38-21(52806)B
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C--> 30 <141> CURRENT FILING DATE: 2006-01-04
     30 <150> PRIOR APPLICATION NUMBER: PCT/US04/21692
     32 <151> PRIOR FILING DATE: 2004-07-06
     35 <150> PRIOR APPLICATION NUMBER: US 60/485,483
     37 <151> PRIOR FILING DATE: 2003-07-07
     41 <160> NUMBER OF SEQ ID NOS: 33
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PATENT APPLICATION: US/10/563,270

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359 Pro Asn Leu Asn Ala Ser Gln Gln Ala Ile Thr Pro Tyr Ala Glu Ser 360			22+	at a	22t	aa2		C 22	C22	aca.	ata		cca	tat	act	maa		682
360																		002
362 tat att gat act gtt caa gat aga atg aaa caa aga gat agg gaa tca 730 363 Tyr Ile Asp Thr Val Gln Asp Arg Met Lys Gln Arg Asp Arg Glu Ser 65 364 55 60 65 366 aaa cta act ggt aaa cca at aat aat agt gaa gaa caa ata ata gat ggg 778 367 Lys Leu Thr Gly Lys Pro Ile Asn Met Gln Glu Gln Ile Ile Asp Gly 80 370 tgg ttt tta gct aga ttc tgg ata ttt aaa gat caa ata aat aat ag aat caa at cat cat gaa gat gan gag 80 370 tgg ttt tta gct aga ttc tgg ata ttt aaa gat caa aat aat cat cat gat gag 80 371 Trp Phe Leu Ala Arg Phe Trp Ile Phe Lys Asp Gln Asn Asn Asn Asn His 90 372 85 90 374 caa aca aat aga ttt ata tcc tgg ttt aaa gat aat ctt gct agt tcg 874 375 Gln Thr Asn Arg Phe Ile Ser Trp Phe Lys Asp Asn Lau Ala Ser Ser 110 376 100 105 110 378 aag gt tat gac agt ata gca gaa aca at ggg tta gta gta gta aca aat ggg tta gta gta gta gta aca aat tgg gt tta gac aat at ggg tta gta gta aca aat tgg gt tta aaa gat gat tat aca gag gg ta gt gta gta gta gta gta gta g		PIO	ASII	шец	Poli		Ser	GIII	GIII	AIG		1111	110	TYL	лια		DCI	
364 Strong The Asp Thr Val Gln Asp Asp Met Lys Gln Arg Asp Arg Glu Ser		+ - +	2++	~a+	3.a+		022	ant.	202	ata	_	C22	202	ast	200		tca	730
364 aac cta act ggt aac cca ata at atg caa gaa caa ata ata ggt gga affect act act ggt ga acca at at atg caa gaa caa ata atg ggt gga affect gas by the state of the state o																		750
366 aaa cta act ggt aaa cca ata ata ata aga caa gaa caa ata ata aga caa ata ata aga caa ata ata gga caa ata ata ata gga caa ata cat ata ata ata ata cat ata ata ata ata cat ata ata cat ata ata cat ata ata ata cat ata ata ata ata caa ata ata caa ata ata caa ata ttt aaa aaa caa <td></td> <td>TYL</td> <td>116</td> <td>Asp</td> <td></td> <td>vai</td> <td>GIII</td> <td>Asp</td> <td>Ary</td> <td></td> <td>цуз</td> <td>GIII</td> <td>Arg</td> <td>rsp</td> <td></td> <td>Giu</td> <td>361</td> <td></td>		TYL	116	Asp		vai	GIII	Asp	Ary		цуз	GIII	Arg	rsp		Giu	361	
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370 tgg ttt tta gct aga ttc tgg ata ttt aaa gat caa aat aac aat cat 826		пуз	пец		Gry	Буз	110	110		Mec	0111	JIU	0111		110	пор	O ₁	
371 Trp Phe Leu Ala Arg Phe Trp Ile Phe Lys Asp Gln Asn Asn Asn His 372 85 90 95 374 caa aca aat aga ttt ata tcc tgg ttt aaa gat aat ctt gct agt tcg 375 Gln Thr Asn Arg Phe Ile Ser Trp Phe Lys Asp Asn Leu Ala Ser Ser 376 100 105 115 378 aag ggg tat gac agt ata gca ga aca at gg ggc tta aaa ata gaa gca 379 Lys Gly Tyr Asp Ser Ile Ala Glu Gln Met Gly Leu Lys Ile Glu Ala 380 120 125 130 382 tta aat gat atg gat gta aca aat att gat tat aca tct aaa aca ggt 383 Leu Asn Asp Met Asp Val Thr Asn Ile Asp Tyr Thr Ser Lys Thr Gly 384 135 140 145 386 gat acc ata tat aat gga att tct gaa cta aca att ata aca gga aca 387 Asp Thr Ile Tyr Asn Gly Ile Ser Glu Leu Thr Asn Tyr Thr Gly Thr 388 150 150 165 390 acc caa aaa atg aaa acc gat agt ttt caa aga gat tat aca act act 391 Thr Gln Lys Met Lys Thr Asp Ser Phe Gln Arg Asp Tyr Thr Lys Ser 392 165 170 175 394 gaa tcc act tca gta aca aat ggg ttt caa tta gga ttt aaa gtt gct 395 Glu Ser Thr Ser Val Thr Asn Gly Leu Gln Leu Gly Phe Lys Val Ala 396 180 180 185 190 195 398 gct aag gga gt gtt gtt cac act gat agt tta gat aca act agt gtt 399 Ala Lys Gly Val Val Val Ala Leu Ala Gly Ala Asp Phe Glu Thr Ser Val 403 Thr Tyr Asn Leu Ser Ser Thr Thr Thr Glu Thr Asn Thr Ile Ser Asp 404 205 210 402 acc tat aat tat cat ct ca gaa gat tac aca act acc aga gtt acc act tca gat agt tta acc acc act gaa acc acc acc acc acc acc acc acc acc		taa	+++		act	202	tta	taa		+++	222	aat	caa		aac	aat	cat	826
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387 Asp Thr Ile Tyr Asn Gly Ile Ser Glu Leu Thr Asn Tyr Thr Gly Thr 388		gat	acc	ata		aat	ада	att	tct		cta	aca	aat	tat		σσa	aca	1018
388 150 155 160 390 acc caa aaa atg aaa acg gat agt ttt caa aga gat tat aca aaa tct 1066 391 Thr Gln Lys Met Lys Thr Asp Ser Phe Gln Arg Asp Tyr Thr Lys Ser 170 392 165 170 175 394 gaa tcc act tca gta aca aat ggg tta caa tta gga ttt aaa gtt gct 1114 395 Glu Ser Thr Ser Val Thr Asn Gly Leu Gln Leu Gly Phe Lys Val Ala 185 396 180 185 180 190 195 398 gct aag gga gta gtt gca tta gca ggt ga gtt gca gat ttt gaa aca agt gtt 1162 190 195 399 Ala Lys Gly Val Val Ala Leu Ala Gly Ala Asp Phe Glu Thr Ser Val 100 200 205 210 402 acc tat aat tta tca tct act aca act gaa aca act gaa aca act act act act act act act act a																		
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396 180 185 190 195 398 gct aag gga gta gtt gct gca tta gca ggt gca gat ttt gaa aca agt gtt gpg Ala Lys Gly Val Val Ala Leu Ala Gly Ala Asp Phe Glu Thr Ser Val 200 1162 400 200 200 205 210 402 acc tat aat tta tca tct aca act gaa aca aat aca ata tcg gat 403 1210 403 Thr Tyr Asn Leu Ser Ser Thr Thr Thr Glu Thr Asn Thr Ile Ser Asp 220 225 404 215 220 225 406 aag ttt act gtt cca tct caa gaa gtt aca tta tcc cca gga cat aaa 1258 1258 407 Lys Phe Thr Val Pro Ser Gln Glu Val Thr Leu Ser Pro Gly His Lys 230 235 240 410 gca gtg gtg aaa cat gat ttg aga aaa atg gtg tat ttt ggg act cat ala 1306 1306 411 Ala Val Val Lys His Asp Leu Arg Lys Met Val Tyr Phe Gly Thr His 255 255 414 gat tta aag ggt gat tta aaa gta ggt ttt aat gat aaa gag att gta 1354 415 Asp Leu Lys Gly Asp Leu Lys Val Gly Phe Asn Asp Lys Glu Ile Val		_				_												
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415 Asp Leu Lys Gly Asp Leu Lys Val Gly Phe Asn Asp Lys Glu Ile Val																		1354
							265					270					275	

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/563,270

DATE: 01/13/2006 TIME: 10:16:01

Input Set : A:\pto.da.txt

Output Set: N:\CRF4\01132006\J563270.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:26; N Pos. 3,9
Seq#:27; N Pos. 6,24
Seq#:28; N Pos. 6
Seq#:29; N Pos. 18

VERIFICATION SUMMARYPATENT APPLICATION: **US/10/563,270**DATE: 01/13/2006

TIME: 10:16:01

Input Set : A:\pto.da.txt

Output Set: N:\CRF4\01132006\J563270.raw

L:30 M:270 C: Current Application Number differs, Replaced Current Application No
L:30 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:103 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:3,Line#:99
L:329 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:5,Line#:325
L:567 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:7,Line#:563
L:803 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:9,Line#:799
L:1080 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:13,Line#:1076
L:1451 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:1473 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:1495 M:259 W: Allowed number of lines exceeded, <223> Other Information:
L:1539 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26 after pos.:0
L:1578 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:28 after pos.:0
L:1636 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:0
L:1659 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:30,Line#:1655